

Preliminary Ecological Appraisal

Survey site:

North Manchester Golf Club, Rhodes House, Manchester Old Road, Middleton, Manchester, M24 4PE

Client:

Jet Network Solutions

Survey date:

26th March 2025

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

Project:

This report is prepared to inform a planning application with the Rochdale Metropolitan Council. The proposal is described as:

“The erection of a telecommunications tower with an associated access track and 10 x 10m concrete slab compound.”

[Unsubmitted]

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

Site Location and Context

The survey site is centred on National Grid Reference: SD 86300 06158 and has an area of approximately ~0.716ha. The site comprises woodland bordered by boundary fencing in Middleton, Manchester.

The underlying geology of the site is sandstone (Pennine Lower Coal Formation), with glacial deposits of Devensian sands and gravels, overlain by slowly permeable, seasonally wet acid loamy and clayey soils of low fertility. Typical habitats of this soil type include seasonally wet pastures and woodlands.

Adjacent to the north is a small access road, adjacent to the south is grassland, adjacent to the east are residential dwellings and gardens, and adjacent to the west is further woodland.

MAGIC habitat designations within 2km include patches of: 'Priority Deciduous Woodland' (on-site with other patches surrounding), 'Open Mosaic Habitat' (~1.06km northeast), 'Priority Lowland Fens' (~1.18km south), and 'Priority Lowland Dry Acid Grassland' (closest ~1.31km southwest).

The closest watercourse to the site is the River Irk located ~0.83km south of the site.

The site is situated along the edge of the suburban area of Middleton. The site includes a small fragment of priority deciduous woodland within a golf course, with grassland, other patches of woodland, and with dams, reservoirs, sluices in the nearby vicinity, within the golf course setting. North, east, and south of the golf course are dwellings and gardens, with more rural areas, further west of the site including linear hedgerow networks and grassland.

Survey Details

The site survey was undertaken by Jessica Sibley BSc (Hons) MSc, Consultant Ecologist and accredited agent on Class 2 Natural England bat licence: 2024-12491-CL18-BAT, to undertake level 1 activities.

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
26/03/2025	8	84	40	8	None
Executive Summary					
<u>Habitats:</u> ➤ A Phase 2 botanical survey will be required to fully characterise the on-site woodland and determine the level of its importance and thus the magnitude of the impacts as part of the proposed works. ➤ A Biodiversity Net Gain (BNG) assessment will be required for the site. ➤ Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). ➤ A Construction Environment Management Plan (CEMP) may be required to prevent pollution of adjacent habitats, during construction. <u>Bats:</u> ➤ A separate Ground Level Tree Assessment (GLTA) should be undertaken after an Arboricultural Impact Assessment (AIA), to determine impacts to roosting bats. <u>Other European Protected Species (EPS):</u> ➤ Other recommendations within this report include precautionary working methods for nesting birds, reptiles, common amphibians, badgers, and hedgehogs (please refer to the relevant sections). Full report follows.					
Survey limitations					

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on the suitability of habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the desk study.

The PEA survey was completed outside of the optimal botanical survey period (April to October) limiting the identification of ground flora communities which might not yet be present for full assessment. However, given the habitat types present on-site, minor omissions on this basis are unlikely to alter the characterisation of the site, and therefore it is not considered to be a significant limitation.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present, and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

Ecological Survey Factor	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.
Conclusion, Impact or Recommendations	
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, proposal plan in appendix 3, and photos in appendix 4). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
Summary of Survey Findings (UKHab codes used) Primary codes: - Lowland mixed deciduous woodland [w1f] - Built linear features [u1e] Secondary codes: - Fence [612]	<u>On-site habitats:</u> Lowland mixed deciduous woodland – [w1f] The site contains lowland mixed deciduous woodland which is listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Tree species within the woodland include: D: Pedunculate oak <i>Quercus robur</i> and silver birch <i>Betula pendula</i> . F: Hawthorn <i>Crataegus monogyna</i> . O: Grey poplar <i>Populus × canescens</i> , common hazel <i>Corylus avellana</i> , willow <i>Salix sp.</i> , cherry <i>Prunus sp.</i> , and horse chestnut <i>Aesculus hippocastanum</i> . R: European beech <i>Fagus sylvatica</i> . Understorey vegetation includes: F: Ivy <i>Hedera helix</i> , holly <i>Ilex aquifolium</i> , and bramble <i>Rubus fruticosus agg.</i> O: Lesser celandine <i>Ficaria verna</i> , nettle <i>Urtica dioica</i> , cleavers <i>Galium aparine</i> , wood avens <i>Geum urbanum</i> , cherry laurel <i>Prunus laurocerasus</i> . R: Bracken <i>Pteridium aquilinum</i> , and privet <i>Ligustrum vulgare</i> .

	Woodland – condition indication: Three age classes are present (i.e., young, intermediate, and old). There is no significant browsing damage evident. Cherry laurel is present within the woodland at <10%. 3-4 native tree species are present across the woodland parcel. ~50-80% of the canopy trees and understorey shrubs are native. 10-20% of the woodland has areas of temporary open space. All three age classes are present (seedlings, saplings, and young trees). 11-25% mortality/crown dieback was recorded. A recognisable NVC plant community is present. Three storeys are present (upper, middle, and shrub layer). No veteran trees are present. Between 25-50% of the survey plot has standing deadwood, including branches, stems, stumps, and small cavities. <1ha in total of nutrient enrichment across the woodland area, and <20% of the woodland has damaged ground. Built linear features – fencing [u1e 612] Along the north boundary of the site is ~2m tall metal fencing.
<i>Foreseen Impacts</i>	The proposed development will result in the loss of <0.05ha of lowland mixed deciduous woodland. This could result in a net loss in biodiversity at the site.
<i>Recommendations</i>	A Phase 2 botanical survey will be required to fully characterise the on-site woodland and determine the level of its importance and thus the magnitude of the impacts as part of the proposed works. This survey must be undertaken between March and May. A habitat management plan will be required outlining protection, compensation, and enhancement measures for the proposed development. <i>(‘Important habitats’: Local Biodiversity Action Plan/list habitats, s.41 NERC Act 2006 (England) Habitats of Principal Importance), Annex 1 Habitats (Habitats Directive habitats of international importance) and irreplaceable habitats, which once lost cannot be recreated (Technical note T3 of CIEEM et al, 2019 National Planning Policy Framework 2023 (in Biodiversity guidance))).</i>

	Biodiversity Net Gain (BNG): The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. This is mandatory for larger developments and came into force for smaller developments on 2nd April 2024. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain. Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). Best practice measures to minimise the possibility of pollution affecting adjacent habitats must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this.
Locality and Designated Sites	
Summary of Survey Findings	<u>On-site designations:</u> The site is not subject to any statutory designation. <u>Statutory designated sites (within 2km):</u> There are two statutory sites within 2km of the site, as detailed below: • Alkrington Woods Local Nature Reserve (LNR) – ~0.65km south – (woodland, grassland, marsh, and standing water). • Hopwood Woodlands LNR – ~1.93km northeast – (woodland). The site lies within the 'impact risk zones' for local Sites of Special Scientific Interest (SSSIs).

	<u>Non-statutory designated sites:</u> The presence of non-statutory designated sites within 2km of the site cannot be established without data from Greater Manchester Local Record Centre (GMLRC).
<i>Foreseen Impacts</i>	<u>On-site designations:</u> N/A <u>Statutory and non-statutory designated sites:</u> No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as urban location with surrounding physical barriers. The site lies within the impact risk zone for local SSSIs. However, the proposed development is not listed as a possible high risk for these designations; therefore consultation with Natural England (NE) is not required.
<i>Recommendations</i>	<u>On-site designations:</u> None required. <u>Statutory and non-statutory designated sites:</u> None required.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species recorded on site.
<i>Foreseen Impacts</i>	N/A

Recommendations	No further surveys but remain vigilant.										
Invertebrates											
Summary of Survey Findings	The habitats present on-site, including woodland, likely provide common invertebrates with opportunities to forage and shelter.										
Foreseen Impacts	A low number of trees (i.e., <20) and small area of ground cover from the woodland will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to the presence of more extensive habitat locally.										
Recommendations	No further surveys. <u>Suggested biodiversity enhancements:</u> The site elsewhere could be further enhanced via the provision of native wildflowers or wildflower turf, which would provide foraging opportunities for invertebrates.										
Bats											
Summary of Survey Findings	<u>European Protected Species Licence (EPSL) data:</u> A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roost sites in close proximity to the licensed site. There is one EPSL within a 2km radius of the site as detailed below: <table><tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr><tr><td>2015-8774-EPS-MIT</td><td>Common pipistrelle</td><td>~1.30km east</td><td>Destruction of a breeding site and resting place</td></tr></table>			EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2015-8774-EPS-MIT	Common pipistrelle	~1.30km east	Destruction of a breeding site and resting place
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	There are no Special Areas of Conservation (SACs) designated for bats within 10km of the site. <u>Foraging and commuting habitat:</u> Habitats recorded on-site are assessed to provide foraging and commuting opportunities for bats in the form of a small patch of woodland. This habitat is of moderate value for local foraging and commuting bats. The wider site includes larger patches of woodland, expanses of grassland, and waterbodies, of high value for local foraging and commuting bats. <u>Roosting habitat:</u> The on-site trees were not subject to a roost inspection, given the high number within the woodland, and a schedule for trees to be removed is not yet available. However, some of the trees in the woodland were recorded to have potential roost features for bats.
<i>Foreseen Impacts</i>	<u>Roosting bats:</u> The proposed development will result in the felling/pruning of on-site trees, which were not subject to a full roost assessment. The trees to be felled/pruned could contain suitable bat roost features and this could result in the damage/disturbance/destruction of any bat roosts present and cause injury or death to bats. <u>Foraging and commuting bats:</u> The proposed development will result in the loss of a low number of trees but given the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats.
<i>Recommendations</i>	<u>Roosting bats:</u>

	Prior to any tree pruning or felling, the trees due to be impacted should be subject to separate Ground Level Tree Assessment (GLTA), after an Arboricultural Impact Assessment (AIA) which details definitive tree loss and retention. <u>Foraging and commuting bats:</u> No further surveys are required. <u>Suggested biodiversity enhancements:</u> Enhancements are dependent on the outcome of further surveys.
Birds	
<i>Summary of Survey Findings</i>	<u>Nesting birds:</u> A magpie nest was recorded along one of the on-site trees, furthermore, the trees offer nesting opportunities, and nest-building resources for birds. No habitat for Schedule 1 birds was observed. <u>Barn owls:</u> The site does not appear to provide any suitable nesting sites for barn owls. <u>Overwintering birds:</u> Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.
<i>Foreseen Impacts</i>	<u>Nesting birds:</u>

	The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. <u>Barn owls:</u> None foreseen. <u>Overwintering birds:</u> None foreseen.
<i>Recommendations</i>	<u>Nesting birds:</u> Tree removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. <u>Barn owls:</u> None required. <u>Overwintering birds:</u> None required.

	<u>Suggested biodiversity enhancements:</u> The installation of a minimum of two bird boxes on mature trees around the site boundaries will provide additional nesting habitat for birds e.g. • Vivara Pro Seville 32mm WoodStone Nest Box • Vivara Pro Barcelona WoodStone Open Nest Box • Woodstone Nest Box (Or a similar alternative brand). Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.
Reptiles	
Summary of Survey Findings	<u>EPSL data:</u> A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. <u>Habitat suitability:</u> The site provides good habitat suitability for reptiles including woodland for refuge and commuting. The presence of reptiles on-site cannot be discounted. The site also connects well to areas of grassland, other pockets of woodland, and waterbodies. These adjacent habitats provide optimal foraging, commuting, and refuge opportunities for reptiles and are well connected to further suitable habitat in the wider landscape. The presence of reptiles utilising these adjacent habitats cannot be discounted.

<i>Foreseen Impacts</i>	Although a small area of suitable habitat (i.e., <20 trees and some ground flora) is being removed as part of the development, there is a low risk that a low number of reptiles could be present in the vicinity of the works. These could be injured or killed without mitigation. The site does not form a connective pathway or stepping stone between areas of suitable reptile habitat in the wider landscape and the development is unlikely to lead to reptile habitat fragmentation.
<i>Recommendations</i>	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures: • A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any reptiles to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. In the unlikely event that a reptile is identified, works must cease, and advice must be sought from a suitably qualified ecologist. <u>Suggested biodiversity enhancements:</u> The site could be enhanced for reptiles post-development with the inclusion of log piles (created from felled materials) and planting of areas of native shrubs, to provide sheltering opportunities.
Amphibians	

<i>Summary of Survey Findings</i>	<u>EPSL data:</u> A review of the MAGIC database returned no granted EPSL records for Great Crested Newts (GCN) within 2km of the site. Furthermore, no positive class survey licence returns or District Level Licencing (DLL) historic survey data (2017 – 2019) were present within 2km of the site. <u>Aquatic habitat suitability (including ponds within 500m):</u> GCN exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; GCN are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). There are no ponds on the site, however a review of aerial imagery (MAGIC and OS Maps) indicates one pond (P1), a reservoir, a sluice, and a dam within 500m. P1 is located ~398m south of the site. The reservoir is located ~134m east, the dam is located ~339m southwest, and the sluice is located ~467m southwest. The reservoir is disconnected from the site by roads and infrastructure, However, there does not appear to be any significant barriers between the pond, other waterbodies and the site, which would cause disruption to dispersal. <u>Terrestrial habitat suitability:</u> The site provides good terrestrial suitability for GCN and other more common amphibians including woodland for refuge, foraging, and commuting. The presence of GCN on-site cannot be discounted.
<i>Foreseen Impacts</i>	When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss or significant disturbance of <0.05ha of woodland. If GCN are present within the closest waterbody (i.e., the reservoir ~134m east), when completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces a Green risk score, which states: Offence Highly Unlikely.

<i>Recommendations</i>	Owing to the nature of the proposed development and the low potential for impacts to GCN, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures: • A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any amphibians to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any common amphibians are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. In the unlikely event that a GCN is identified, works must cease, and advice must be sought from a suitably qualified ecologist. <u>Suggested biodiversity enhancements:</u> The site could be enhanced for amphibians post-development through creation of amphibian hibernacula using logs from site clearance. Information on how to construct a hibernaculum can be found here: https://www.wiltshirewildlife.org/hibernaculum
Badger	
<i>Summary of Survey Findings</i>	No badger setts were noted on site or within a 30m radius of the site. Furthermore, no evidence of foraging badgers was noted within the development area. However, the site is considered suitable for badger sett excavation and provides suitable foraging habitat.
<i>Foreseen Impacts</i>	None foreseen.

<i>Recommendations</i>	Owing to the nature of the proposed development and the low potential for impacts to badgers, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: • A toolbox talk will be given to contractors regarding the possible presence of badgers at the site. • A pre-commencement inspection of the site will be undertaken for any new badger activity if works do not commence within three months. • Heras fencing will be erected around the working area to prevent encroachment into retained habitats where badger setts could be present. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. In the unlikely event that a badger sett is identified, works must cease and advice must be sought from a suitably qualified ecologist. <u>Suggested biodiversity enhancements:</u> The site could be enhanced for badgers by planting bramble and damson <i>Prunus domestica subsp. insititia</i>, as well as planting fruit-bearing trees to increase foraging opportunities for badgers.
Riparian animals	
<i>Summary of Survey Findings</i>	<u>EPSL data:</u> A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site.

	<u>Habitat suitability:</u> There are no watercourses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	<u>EPSL data:</u> A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. <u>Habitat suitability:</u> The site lies outside of the known current range for hazel dormice. As such it is considered unlikely that hazel dormice are present at the site.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None required.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The woodland on-site provides foraging and refuge opportunities for hedgehogs.
<i>Foreseen Impacts</i>	<0.05ha of woodland will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to the presence of more extensive habitat locally. However, construction activities may result in the death or injury of hedgehogs, if present.

<i>Recommendations</i>	Similar to the badgers, a precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. Suggested biodiversity enhancements: The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: ▪ Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. ▪ Creation of brash piles or installation of hedgehog houses in shady areas. ▪ Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.
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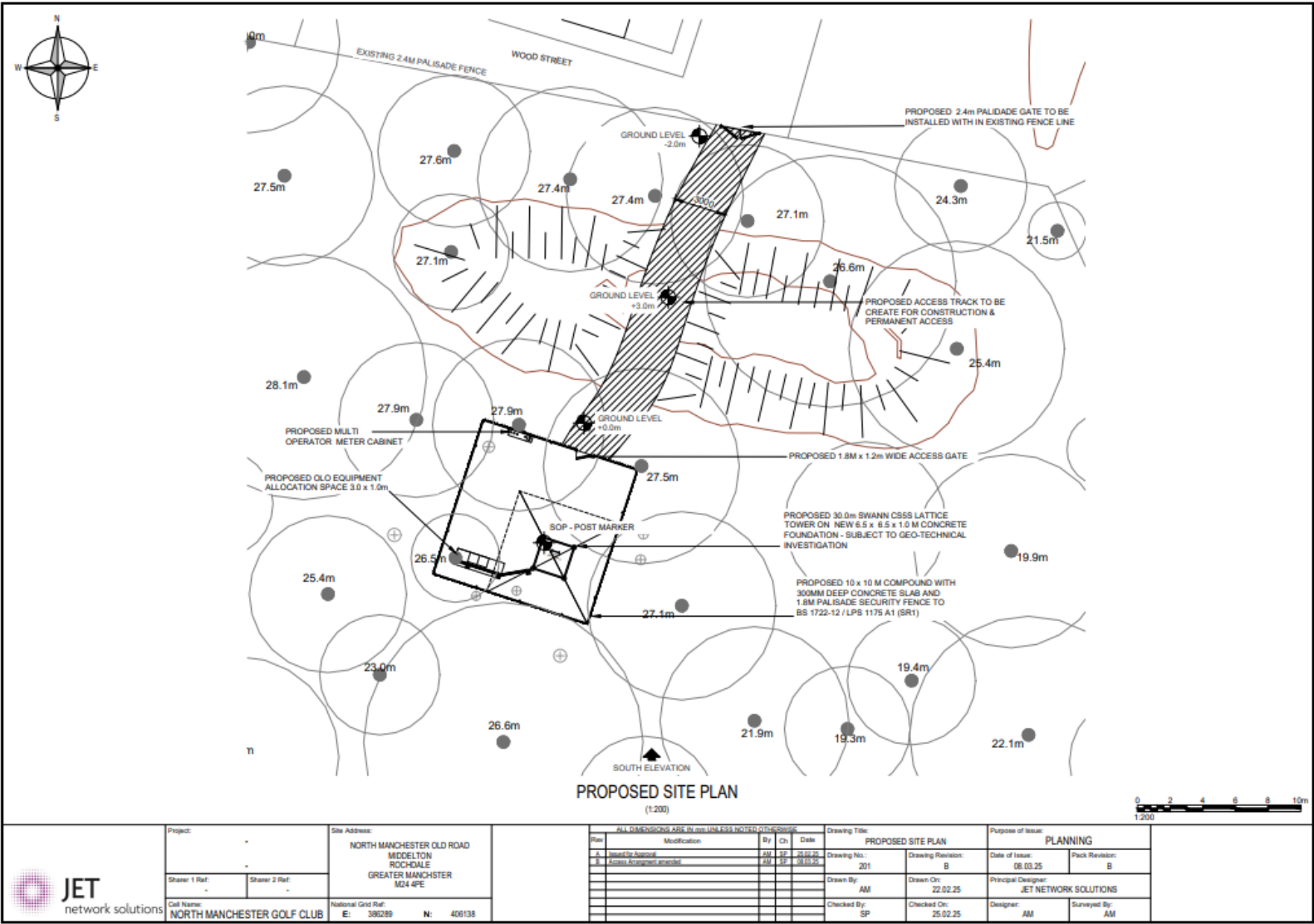
Appendix 1: Habitat map

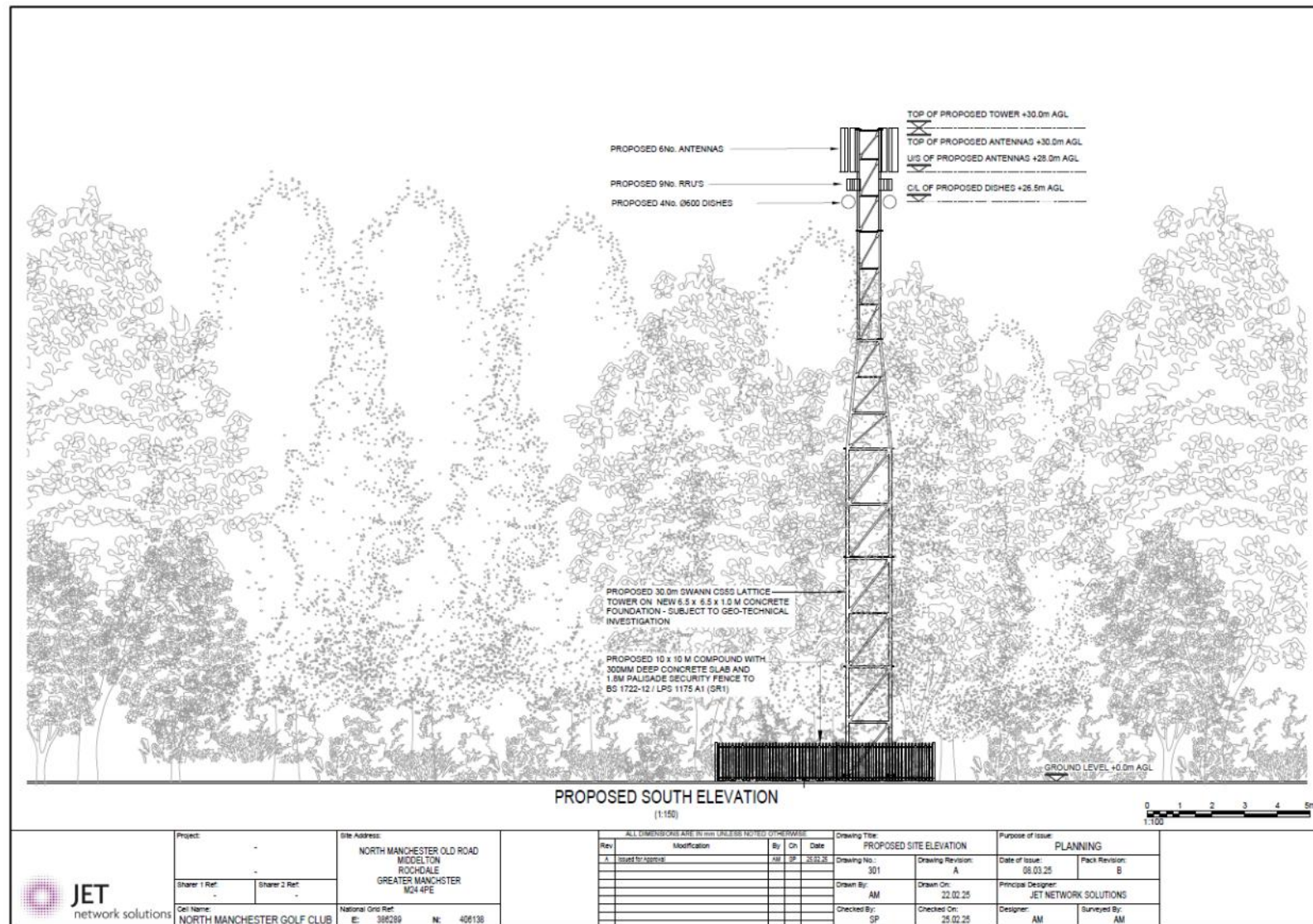


Appendix 2: Location map



Appendix 3: Proposed plan





Appendix 4: Habitat Photos

Lowland mixed deciduous woodland	
Photograph	Description
	Figures 1, 2, and 3: On-site woodland and shrub layer, facing northeast, north, and northwest respectively.

			
Magpie nest			
Photograph		Description	
		Figure 4: On-site magpie nest.	

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Version control			
Status	Issue	Name	Date
Draft	0.1	Jessica Sibley BSc (Hons) MSc, Consultant Ecologist	27/03/2025
Proof	0.5	Fay Brotherhood BSc (Hons) MSc, Senior Consultant, FISC 4 Botanist	28/03/2025
Final	1.0	Jessica Sibley BSc (Hons) MSc, Consultant Ecologist	31/03/2025